UNION CARBIDE

NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 3 — No. 8 **Thursday, June 1, 1972**

Input from women will contribute much to division's affirmative action

Women now have Affirmative Action responsibilities at each of the Nuclear Division's four installations. The 10 women have been asked to participate in the development and implementation of their installation's Affirmative Action Plan and to review the Nuclear Division's program from the woman's viewpoint. These activities are in addition to their responsibilities as divisional Affirmative Action Representatives.

Appointment of nearly 70 Affirmative Action Representatives was announced in the December 16, 1971 **Nuclear Division News** by Roger F. Hibbs, Division President.

In addition to having responsibilities for coordinating, planning, monitoring and reporting progress in affirmative action, all of the representatives have been communicating the intent and progress of the Affirmative Action Program to all employees. They also provide a system for feedback of employee opinion.

The following women are Affirmative Action Representatives: Mildred M. Clark, Bobbye W. Curtis, Joyce B. Ferguson, Oak Ridge Gaseous Diffusion Plant; Phyllis C. Johnson, Oak Ridge Y-12 Plant; Claire Nader, Brena K. Stevens, Marva F. Walton, Margaret M. Williams, Oak Ridge National Laboratory, and Jo A. Grisham, Alice J. Lemonds, Paducah Gaseous Diffusion Plant.

In addition, the Equal Opportunity Coordinators at ORNL are discussing subjects related to equal opportunity with a group of women ORNL employees: Rhonda Grell, Elizabeth Howard, Yvonne Lovely, Ruby Miller, Vernell Moore, Lindy Norris and Carol Oen. This group will consider the long range plans and sometimes subtle problems related to affirmative action for women.

QUESTION BOX

If you have a question on company benefits, policies, etc., just drop it in the mail to the Editor, Nuclear Division News, Building 9704-2, Y-12. You may or may not sign your name. It will not be used in the News.

Question: In a recent question box this statement appeared. "Women presently on our payroll are being reviewed to determine which are qualified or can be qualified with further training for managerial jobs." How is this being done? I haven't been contacted. Am I to wait patiently until contacted or should I generate some action with my supervision? What is the proper procedure?

Answer: Supervisors and Affirmative Action Representatives are reviewing the qualifications of women employees to identify candidates for promotion. Whether you are or are not contacted, you should always feel free to talk to your supervisor about your chances for advancement in your present field or in other careers which may interest you. Your supervisor may refer you to other staff members for advice.

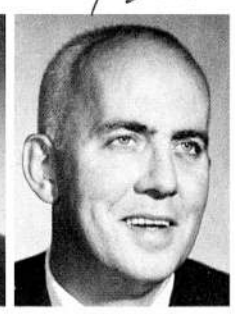
You should be aware, though, that there are very few promotions each year into managerial jobs. In the 15-month period from January 1971, through May 1972, only 79 men and women received promotions in the entire Nuclear Division and we expect only about 50 during fiscal year 1973, over half of them being promotions into first-line craft supervision. According to our newest Affirmative Action Plan, we project that only about one woman in 200 will be promoted next year into the Officials and Managers category of jobs. (One man in 400 will probably be promoted also.)

Because there are so few promotions and because these are usually into a variety of job types, programs for developing the necessary skills are generally set upon a highly individualized basis. Use is made of on-the-job training and existing programs inside and outside the Nuclear Division. We will follow the same procedure to insure our meeting or exceeding the goals of the Affirmative Action Plan.

Question: When will the amount of social security I pay be increased again?

Answer: You are presently paying a combined rate of 5.20 percent on the first $9,000 of your annual earnings. This rate (combined FICA and health plan rate) will be increased to 5.65 in January, 1973, to 5.85 in 1976, to 5.95 in 1980, and will top out at 6.05 in 1987, **according to present laws.** The base of $9,000 is not scheduled for increase at present.

Clark



Denton

Hopkins

Jordan

Sommerfeld

Winkel

'Analytical Chemistry' selects N.G. Anderson

Norman G. Anderson, ORNL Molecular Anatomy Program (MAN), has been appointed to the Advisory Board of **Analytical Chemistry.** The magazine covers advanced theories, latest applications and most recent equipment in clinical, biochemical and medical areas.

Anderson directs the MAN Program which in the past few years has been responsible for the development of ultracentrifuges and the GeMSAEC.

Anderson came to ORNL in 1952. In addition to directing the MAN Program, he is a faculty member in The University of Tennessee-Oak Ridge Graduate School of Biomedical Sciences. He holds the B.A. from Augsburg College, the M.A. and Ph.D. degrees from Duke University. Anderson is chairman of the U.S. National Committee for the International Union of Pure and Applied Biophysics.

NUCLEAR DIVISION SAFETY SCOREBOARD

Time worked without a lost-time accident through May 25:

ORGDP	45 Days	597,600 Man-Hours
ORNL	45 Days	799,332 Man-Hours
Paducah	64 Days	396,000 Man-Hours
Y-12	219 Days	8,117,000 Man-Hours

Safety is everyone's concern!

Organization changes affect diffusion plants in Paducah, Oak Ridge

The appointment of Robert G. Jordan as Manager of a newly established Office of Safety and Environmental Protection has been announced by Roger F. Hibbs, Nuclear Division President.

The office has been established to coordinate the Division's efforts in achieving its safety and environmental goals. Jordan, who has previously served as Oak Ridge Gaseous Diffusion Plant Superintendent, will assist management in fulfilling responsibilities under the Occupational Health and Safety Act and the National Environmental Protection Act.

In addition to Jordan's appointment, Hibbs announced several additional organizational changes:

Other Appointments

Robert A. Winkel, who has been Superintendent at the Paducah Gaseous Diffusion Plant, will succeed Jordan as ORGDP Superintendent. Kenneth W. Sommerfeld, formerly Operations Division Superintendent at ORGDP, has been named Assistant Plant Superintendent with responsibility for operations and maintenance functions.

Clyde C. Hopkins, who has been serving as Manager of Accounting for the Nuclear Division, will succeed Winkel as Superintendent at Paducah. John L. Clark, Operations Division Superintendent, will become Assistant Plant Superintendent with responsibility for operations and maintenance functions.

James K. Denton, Superintendent of Finance for the Nuclear Division, has been appointed Manager of Accounting.

Jordan joined Union Carbide in 1943 at ORGDP. In 1951, he transferred to Paducah, and became Plant Superintendent there in 1954. He was appointed Y-12 Plant Superintendent in March, 1961, and was named Superintendent at ORGDP the following year. He is a member of the Oak Ridge Housing Authority. Jordan is married to the former Lucile Beaty of Carroll, Ohio, and has one son. They live in Oak Ridge.

Active Civic Leader

Winkel has been with Union Carbide since January, 1944. He worked at ORGDP for several years, following which he was named Maintenance Division Superintendent at the Paducah Plant. In 1957 he was promoted to Assistant Plant Superintendent, and, in 1961, was named Plant Superintendent. Among his many activities, he is a member of the state of Kentucky Science and Technology Commission, and is chairman of Kentucky Training and Development Foundation. He is a director of the Paducah-McCracken County Community Chest, and vice-president of the Four-Rivers Boy Scout Council. Winkel is married to the former Ann Straub of St. Louis. They have five children.

Hopkins has been with Union Carbide's Nuclear Division since 1952. He

(Continued on Page 8)

Off-the-job accidents mar safety picture for Nuclear Division employees

TWISTED WRECKAGE—Tom McCloud, Y-12 Radiation Safety, inspects a piece of broken steel from his wrecked auto. A guard rail near the ORGDP complex went completely through McCloud's car, pinning him in the wreckage. "The human body can be pushed so far," McCloud said in explaining the exhaustion he was experiencing at the time of his mishap.

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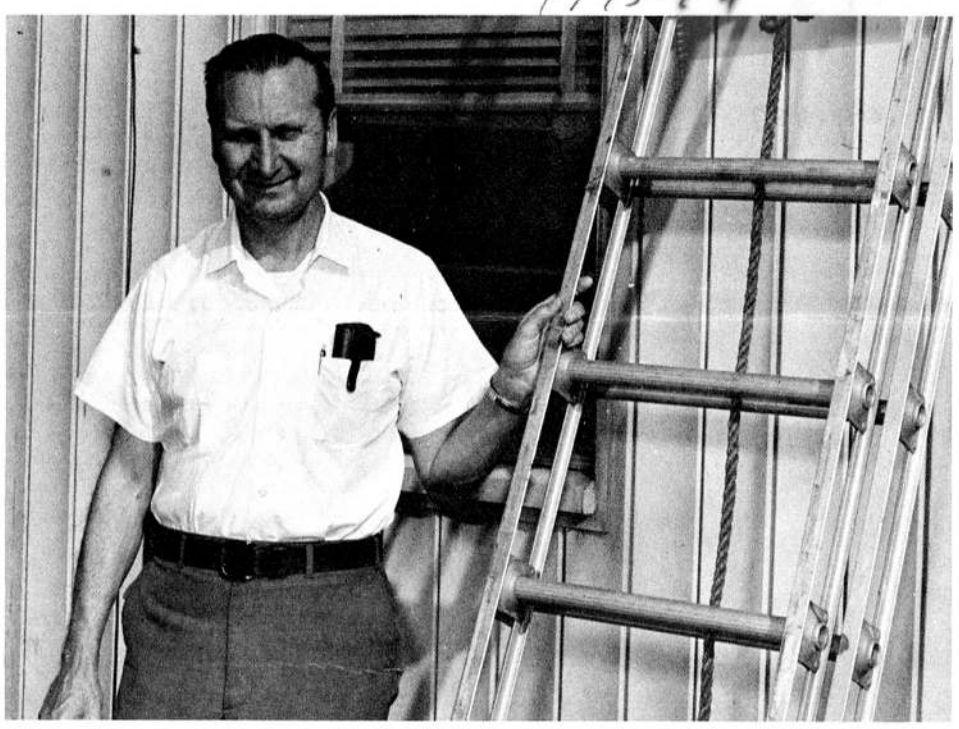

LADDER VICTIM—A. J. Gentry Jr., ORNL's Plant and Equipment Division, lost more than six months from work because of a fall from a ladder at his Lenoir City home. "Try to break a bone which will heal faster," Gentry says, "if you fall from a ladder some day; healing is very slow in the heel area."

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James A. Young, Editor, Y-12
Ext. 3-7100
Martha Goolsby, Assoc. Editor, ORNL
Ext. 3-6421
Keith Bryant, Paducah
Bell 369
Doug Carter, ORGDP
Ext. 3-3017

— Member —
APPALACHIAN INDUSTRIAL
EDITOR'S ASSOCIATION
INTERNATIONAL ASSOCIATION OF
BUSINESS COMMUNICATORS

Office
Post Office Box Y
Oak Ridge, Tenn. 37830

Howard Anderson

Nationally, the Nuclear Division enjoys an on-the-job safety record that is the envy of most other industries.

Last year we had an accident frequency rate of 0.68 (frequency rate is defined as number of lost-time injuries for every million man-hours worked.) Industry, as a whole, had a frequency rate of 8.87 in 1970; the chemical industry had one of 4.28.

But off-the-job is another story. Last year alone, employees in the four Nuclear Division installations suffered 186 lost-time injuries. Four accidents were fatal.

In an all-out assault on non-occupational injuries, we have chosen rather unusual accidents from each of the four plants. We let each employee tell his own story.

Young Y-12er survives bone-crushing accident last fall; loses five months plus from his job

In lots of ways, Tom McCloud is lucky.

His youth and physical stamina probably saved his life last fall in an ordeal he would just as soon forget. McCloud was working full-time as a health physics inspector in Radiation Safety in Y-12, carrying 17-quarter hours at The University of Tennessee, and was building a house on the lake in his spare time.

November 18 saw him through the last of his mid-term exams at UT. He started home about 12:30 a.m. from Oak Ridge. Just a mile east of the ORGDP complex he drifted off to sleep and hit a guard rail on the Turnpike. For more than four hours he lay pinned in the wreckage of his auto before he could be removed and be transported to the hospital. He blacked out several times, and endured intense pain. To illustrate the intensity of his pain, on the third day of his hospital stay he required 10 injections of morphine. He was in the intensive care unit for eight days and remained another 16 days in the hospital.

McCloud sustained two breaks in his ankle, a severely torn knee joint, a compound fracture of the upper leg bone, and a fracture of the hip. He also sustained a brain concussion and severe lacerations on his face. His hospital bill alone was $2,844, not including physicians' fees. To compound his miseries, some youths stole a checkbook from the glove compartment of his wrecked vehicle and processed some $400 in checks through his account! (The boys' parents did make restitution of these funds, however.)

The Y-12er lost some five months of work due to his accident. He will have at least two more hospital confinements, as a pin in his hip will have to be surgically removed, and plastic surgery will be required on his face.

McCloud now sees that his accident was due primarily to sheer exhaustion. "The human body can be pushed so far, and I did it," he admits. "I should have known my limits and lived with them. We try to do too much these days. Believe me, I learned a lesson."

Driving is dangerous under the best of conditions. Driving while you are exhausted is dynamite. Just ask Tom McCloud.

'If you're going to break a bone, try to break one that heals faster than the heel!' --- Gentry

Ask a person about an acident he had, and one can always tell the seriousness of the accident by his remembering the date.

ORNL Plant and Equipment Division's A. J. Gentry Jr. began "on Saturday, August 28, 1971, I was installing a cornice on the side of my house in Lenoir City. I had finished the front and was almost finished toward the back. I was also extending the roof shingles above the cornice. To reach my work I was about 15 feet off the ground on an extension ladder.

"Not very much land around Lenoir City is flat and my place is no exception. So, to make the ladder level I had placed a block of 2x6 wood under one leg. I had braced the ladder that way all day. But I was in a hurry since I was almost finished and since my wife had supper almost ready.

"I was trying to reach out as far as possible to finish the job without getting down to move the ladder again. But my movement on the ladder was too much, and the block of wood slipped out. There was nothing to hold to, so I jumped to keep from falling on my head. It hadn't rained for several days and that August ground was as hard as concrete. I landed on my right hip and heel. I broke a bone in my right heel and did extensive damage to the foot.

"At the emergency room my foot was packed in ice to retard swelling and later a cast was put on. I was in the hospital for four days and bedfast for a month. Five weeks after the accident my doctor removed the cast and ordered X-rays. They showed no healing and my second cast was applied.

"My doctor explained that the heel does not have very much blood circulation. Consequently, healing is slow. But it was hard for me to believe that it would take so long for a small bone to heal. After five more weeks in a cast, I had healed enough to get rid of the

(Continued on Page 8)

Cyclists have the same rights as automobiles

A total of 221 days last year was just one of the costs to Howard Anderson, a machinist at the Paducah Plant, for his motorcycle accident. Anderson was riding his cycle when a vehicle pulled out of an exit of a large shopping center directly in his path. He swerved in an effort to miss the vehicle, but his right leg struck the front bumper of the car.

A compound fracture of the right leg kept him off his feet most of his time off.

Anderson points out that there are some two and one-half million motorcyclists on our highways today. "They are harder to see than an auto," he explains, "and we must be more alert for them, and protect them with better driving. They are citizens of the highway also and must be accorded the same courtesy and privileges given other types of vehicles. The automobile driver has the same obligation toward a cyclist that he does for drivers of other vehicles."

Although a motorcycle is harder to see than an auto because of its smaller size, the motorist must give the cycle the right-of-way when it is his.

(Additional story on page eight.)

Pilot prisoner program seen for TAT project

A pilot program to provide industrial skill and technical training for up to 10 specially selected honor prisoners from Tennessee state correctional institutions will be conducted this spring at the Training and Technology (TAT) project at the Oak Ridge Y-12 Plant.

Robert J. Hart, Manager of AEC's Oak Ridge Operations, said the cooperative pilot program with the state of Tennessee is in support of other state and federal actions aimed at rehabilitation, training and job placement for prisoners. These programs are carried out primarily under the Prisoner Rehabilitation Act of 1965.

The activities of the TAT project are conducted in an industrial setting in an unclassified area of the Y-12 Plant.

The prisoners selected for participation in the pilot program will have completed their terms or be eligible for parole by the time their six-month training course is completed. Honor prisoners from throughout the state penal system who are serving one to three-year terms for less serious offenses will be considered as participants. Those selected will be moved to Brushy Mountain Penitentiary in nearby Petros for commuting daily for their training.

Arrangements for the program have been made by TAT in cooperation with Mark Luttrell, state commissioner of corrections, Richie Gaskell, director of rehabilitative services in the Tennessee Department of Corrections, and Robert H. Moore, warden at Brushy Mountain.

Plans for the pilot program call for the prisoners to enter training later this month. The costs of their training will be met through funds provided for TAT under the federal Manpower Development and Training Act (MDTA).

Training is offered in six occupational areas — drafting, electronics, machining, mechanical and process operations, physical testing, and welding.

Funds in support of the worker-training program come from the AEC and from the U. S. Department of Labor and the U. S. Office of Education, Department of Health, Education and Welfare, under interagency agreements with the AEC.

ETSU elects Carbiders' son by large majority

Stephen Harris was recently named secretary of student activities, one of the highest positions in student government at East Tennessee State University He was also elected to the student senate this spring with the most votes ever given one candidate in the history of ETSU student government.

Harris

Harris is currently chairman of homecoming, director of the ETSU Ambassador program, and in charge of freshman orientation. In addition to his student government work, he is vice president of his fraternity, Pi Kappa Alpha, and vice president of the Inter-Fraternity Council.

He was a 1970 graduate of Powell High School and is now a sophomore in pre-law, majoring in political science.

His parents are Mr. and Mrs. George W. Harris, Jr. His father is employed at ORGDP, and his mother (Peggy) is employed at ORNL.

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Hendricks Wood

Foreign assignments received by ORNLers

Four ORNL staff members are slated for foreign assignments this year.

Victor C. A. Vaughen journeyed to Kernforschungsanlage (KFA) in Julich, West Germany in April for an 18-24-month assignment. As part of a reciprocal exchange Heidrun Barnert-Wiemer will come from KFA to ORNL. Vaughen of Chemical Technology Division will be involved in the High Temperature Reactor research at KFA particularly with the reprocessing of irradiated HTGR fuels.

James B. Ball, Physics Division will travel to the Niels Bohr Institute in Copenhagen, Denmark, in July for a 12-month assignment. While at Niels Bohr he will perform collaborative nuclear physics experiments on the Tandem Van de Graaff Accelerator at Riso. The major field of research at Riso is heavy-ion reaction studies, a research field in which Ball has been working at ORNL. During his assignment Ball will be replaced at ORNL by Gudrun Hagemann from the Niels Bohr Institute.

1396-72

Ball

Richard F. Wood, Solid State Division, will leave in August for approximately 12 months on assignment in Europe. Nine months of this time will be spent at the combined facilities of Gothenburg University and Chalmers Institute of Technology at Gothenburg. Approximately 3 months is to be spent at AERE, Harwell, England. Among his research efforts in Gothenburg-Chalmers will be the investigation of solids, particularly surface effects, by low energy electron diffraction. At Harwell the emphasis will be on theoretical studies of radiation damage in high temperature oxides.

Robert W. Hendricks, Metals and Ceramics Division, will spend approximately 12 months at the Kernforschungsanlage (KFA) in Julich beginning in October. He will join a group of experimental solid state physicists and metallurgists working in the area of neutron small-angle scattering, diffuse X-ray scattering and radiation damage. At ORNL Hendricks is the organizer for an international project for the Calibration of Absolute Intensities in Small-Angle X-ray Scattering. Eleven of the 17 laboratories participating in the project are located in Europe, and Hendricks will consult with these laboratories during the course of the experiments.

Alsmiller, Clifford, Trauger named American Nuclear Society fellows

At the Las Vegas meeting to be held June 18-22, three Laboratory staff members will be named Fellows, nine will serve as session chairmen, and 55 papers representing the research of over 90 staff members will be presented. The papers run the gamut of research from radioactivity in lunar samples, to metals research, effects of dosages of radioactivity on animals, fuel reprocessing and shielding calculations.

Serving as session chairmen are Raymond E. Blanco, Mario H. Fontana, John E. Cunningham Jr., Thomas P. Hamrick, Enzo Ricci, William R. Martin, Ernest G. Silver and Gerard de Saussure.

To be named Fellows at the meeting are Donald B. Trauger, associate director of the Laboratory for reactor and engineering sciences; Rufar G. Alsmiller and Charles E. Clifford, both associate directors of Neutron Physics Division.

Becoming a Fellow of the society is a "high token of esteem and recognition reserved for acknowledged attainment in the nuclear field by notable original research or invention, by technical leadership of substantial scope, or by outstanding leadership as a teacher." Through 1970, over a dozen staff members had been recognized as fellows of the society.

Trauger is being honored for his contributions to nuclear reactor technology, especially in the development of high-temperature gas-cooled reactor technology. He is affiliated with the American Physical Society, American Association for the Advancement of Science, Tennessee Academy of Science and the Scientific Research Society of America in addition to ANS.

Alsmiller has been responsible for the major part of the development of the transport theory of nucleonic cascades in matter, made important contributions in the study of electromagnetic cascades, and directed and participated in the development of the theory of high-energy nuclear models. He received the B.A. degree from the University of Louisville, the M.S. from Purdue University and the Ph.D. from the University of Kansas. He has served on the Executive Committee of the Shielding and Dosimetry Division of ANS since 1969.

Clifford is being honored for his participation in the direction of many of the important experimental and theoretical radiation shielding investigations at ORNL over the past two decades and for continuing to foster and influence the development of reactor and weapons radiation shielding research throughout the United States. He received the B.S. degree from the University of Oklahoma and the M.S. from Ohio State University. He has also served as a member of the Executive Committee of the Shielding and Dosimetry Division.

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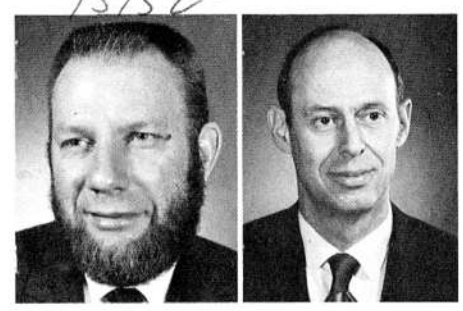
Clifford

1515-2



Alsmiller Trauger

SME names J. C. Hall to worldwide position

Joseph C. Hall, superintendent of Fabrications Shops at ORGDP, has been elected a director of the worldwide Society of Manufacturing Engineers. He will serve a two-year term.

An SME member since 1961, Hall is a past chairman of the Knoxville-Oak Ridge Chapter of SME, of Region 5, the national membership committee, and the national administrative council. He is a mechanical engineering graduate of Oklahoma State University.

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Hall

Hall will help direct the activities of the 45,000 member organization. Headquartered in Dearborn, Michigan. SME is an international organization with members in 40 countries. A member of the World Federation of Engineering Organizations, the society's purpose is to advance scientific knowledge in the field of manufacturing engineering and to apply its resources to research, writing, publishing and disseminating such information.

Lake algae control

Growths of algae constitute one of the major ecological problems facing us today. Thanks to a Union Carbide-produced chemical, a safe, effective algaecide has been developed to combat and control algae not only in lakes, ponds and lagoons, but also swimming pools, watering ponds and recreational areas.

Algae, a low form of plant life, covers ponds, streams and lakes with unsightly masses that obstruct boating and block out sunshine needed for photosynthesis processes of desirable bottom plants. Dead algae cause a tremendous biological oxygen demand with consequent death of fish. And, endanger life of animal and human alike.

Applied Biochemists, Inc. of Milwaukee, Wisc., a firm established to control aquatic nuisances, developed the algaecide, "Cutrine," as a fast, effective, safe means for controlling the algae problem.

"Cutrine" algaecide is a modified form of copper sulfate which has been recognized for years as a fairly effective algaecide. Copper sulfate, however, lacks stability and is susceptible to precipitation in hard waters. Applied Biochemists achieved stabilization by complexing the copper compound with triethanolamine from Union Carbide. After a long series of tests which showed that the complex controlled the algae without harm to desirable life forms, it was registered with the U. S. D. A.

Social Security benefits in disability

If you become severely disabled and are unable to work, you can start drawing Social Security benefits just as if you had reached retirement age. Your dependents can also draw benefits on the same basis as those of a retired employee.

The time element in applying for disability benefits is very important — a delay in making application may result in your losing benefits.

Combined Workmen's Compensation and Social Security benefits cannot go above 80 percent of your total average earnings before you became disabled.

4238

FALL OF MAN—To emphasize the results of ladder carelessness the Paducah Gaseous Diffusion Plant sponsored a contest so employees could guess when the "dummy" would fall. Tom E. Goode, Hugh Vantreece and B. D. Ryan all came within an hour and five minutes of hitting the exact time. The dummy fell 8:55'33" on May 4. The three Paducahans were given a $15 gift certificate to a downtown restaurant for their excellent guesses.

DIVISION Retirees

Bradshaw

Coburn

Ethridge

Hahn

Jennings

Ray

Six Y-12ers retire today, June 1, marking careers totaling 129 years' company service.

John A. Bradshaw, Graphite Shop, came here in 1944. He retires to his Route 5, Clinton, home. Ernest M. Coburn, General Metal Fabrication Shop, who came with Carbide in 1955, lives at Route 1, Oliver Springs.

Retiring to their Oak Ridge homes are Charles C. Ethridge, Dimensional Inspection; and Harry J. Hahn, Buildings and Grounds. Ethridge lives at 105 Hickory Place, and Hahn lives at 505 Michigan Avenue.

William N. Jennings, a 28-year veteran, Electronic Systems Design, lives on Pine Road in Norris. Sherman L. Ray, Guard Department, lives at 1933 Island Home Avenue, Knoxville.

Mrs. Scanlon

Mrs. Dorothy B. Scanlon, a well-known personality around the Purchasing Department at Paducah, retired the last of May. She came to work at the Paducah Plant in April of 1951.

She is well-known for her culinary arts and her golfing prowess, both of which she hopes to put to good use in retirement.

Fast breeder

The Atomic Energy Commission is working on a new type of reactor which will actually produce more nuclear fuel material than it consumes. It is appropriately called a Fast Breeder Reactor.

COMPANY SERVICE —20-25-30—

Y-12 PLANT

9136 145726

30 YEARS

Callihan

Magnuson

Two Y-12ers marked 30 years with Union Carbide Corporation recently, as A. Dixon Callihan and Dale W. Magnuson, physicists in Criticality Studies, observed anniversaries.

Callihan, a native of West Virginia, holds a B.S. degree from Marshall College, an M.S. from Duke, and a Ph.D. from New York University. He and his wife, the former Alva Stroh, live at 102 Oak Lane, Oak Ridge.

Magnuson, a native of Nebraska, was graduated from Nebraska Wesleyan University. He also holds an M.S. degree from Columbia, and received a Ph.D. from The University of Tennessee. He is married to the former Mary Lent, and they live at 11 Brookview Lane, Knoxville.

Both scientists began their Union Carbide careers at Columbia University in 1942, in the S.A.M. Laboratory. Both worked at ORGDP before transferring to ORNL, and finally, to Y-12.

25 YEARS

Evan W. Means, Nelson H. Bethea, Myrl F. Greene, Buford A. Walker, Clyde W. Baird, Stewart Hatcher, Ernest L. Bentley, Harry C. Hoy Jr., Luther A. Walton and William T. Luffman.

20 YEARS

William R. Ellis, Jerry S. Klobe, Charles E. Hughes, Jimmie R. Smith, Talmadge C. Wilson, James R. Demonbrun, Veneta T. Lawson, Elmer L. Turnbill, Homer Young, Lecile C. Litton, William E. Dunlap, Pheolian E. Woods, Thomas R. Harvey, A. Hayes Hunter Jr., Edmond Roberts Jr., Benson W. Garrett, Bobby J. Vest and Anthony J. Caputo.

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McWright

Eslick

Three long-time ORNL employees are retiring today.

Cullen P. McWright of 136 Marietta Circle in Oak Ridge joined ORNL in May of 1947. He is a Services Coordinator in Plant and Equipment Division. He plans to get into some competition golf.

L. F. Eslick came to ORNL in November of 1946. He is a machinist in Plant and Equipment Division. He plans some traveling from his home on Route 2 in Kingston.

Also retiring is head nurse Katherine Hipshire. **ND News** announced her retirement in a previous issue, but she stayed on a few months until another nurse joined the staff.

ORNL

25 YEARS

Carl D. Baumann, George M. Winn, Carl B. McMillian, O. Harvey Sharp, John W. Shuey, Hugh J. Watson, James S. Kerns, Dock Smith, Charles R. Hill, Frank L. Rogers, Alberta P. Henley, Robert Smith Jr., Willie Oggs, Blaine E. Thomas.

20 YEARS

O. E. Schow III, John W. York III, William D. Burch, Gene D. Harrell, Wayne W. King, William B. Grisham, John W. Hunley, Everett Beckham, Willard D. Box, Charles S. Williams, William E. Thomas, Raymond Q. Brashier, Truman D. Johnson, George D. Howell Jr., Gilbert H. Malone, David M. Eissenberg, Fred W. Holtzclaw, James L. Crowley, Rollins E. Helms, Alva C. Duncan, Sigfred Peterson, Juel F. Emery, J. C. Price, Walter G. Whatley, Bill K. Norris.

PADUCAH

20 YEARS

Charles W. Grassham, Talmadge A. Davis, Voris E. Jerrel, Rex L. Jeffrey, Roy W. Collins, Ophelia M. Oliver, Marshall M. Jones Jr., Ezra F. Draper, Eugene Byers and James H. Chestnut.

ORGDP

25 YEARS

Gordon M. Lindner and Edward C. Johnson.

Robert B. Harrington, Rufus D. Hughes, James L. Madix, James W. Smith, George S. Petit, Donald G. Shaner, Arnold A. Strache, Clayton E. Mathis, Robert G. Longmire, Richard R. Shelton.

Ecologist will monitor Tennessee strip mines

William A. Thomas, head of the Environmental Indices Section of the ORNL-NSF Environmental Program, has been appointed to the Tennessee Board of Reclamation Review.

This state board was created under the 1972 strip mine control law which went into effect in March 1972.

Thomas

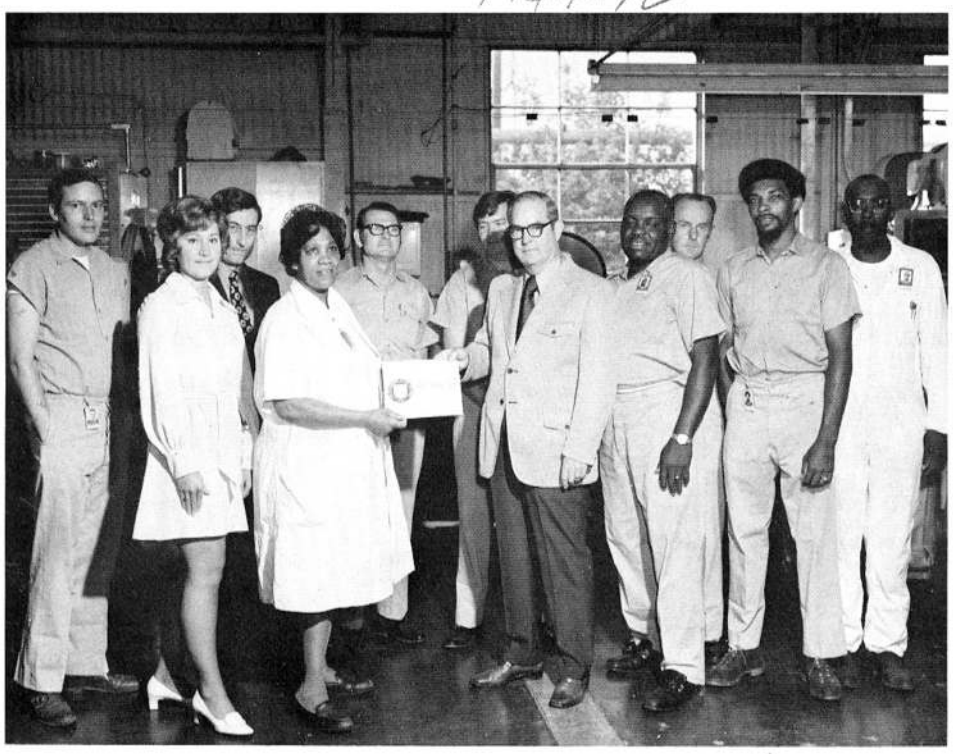
The board consists of five members — the commissioner of the Department of Public Health and four citizen members appointed by the Governor. Two citizens are to be from the public at large with no financial interest in the mining industry nor in any directly related business. The other two are to be representatives of the mining industry.

Thomas is an ecologist who is soon to receive a law degree from The University of Tennessee. He will serve a two-year term.

The board will hear appeals from mineral owners, operators, property owners or other interested people aggrieved by orders, determinations, regulations or rulings of the Commissioner which in any way affect surface mining in this State; represent the unified interest of government, industry and private individuals; and request that such work as is necessary to accomplish the purposes of the Board.

You can still buy bonds

Even though the U.S. Savings bond drive is over in the Nuclear Division, you can still purchase bonds through payroll deductions. Just ask your timekeeper for the forms.



THIRD YEAR REPEATS!—For the third time in as many years, the Decontamination Laundry in ORNL's Operations Division, goes 100 percent in Savings Bond purchases. The department helped make this year's bond drive one of the most successful ever.

SUCCESSFUL BOND DRIVE—The Plant Services Department of the Maintenance Division at the Paducah Plant pledged 100 percent for the purchase of U.S. Savings Bonds, helping to put the Paducah Plant at 72.3 percent participating from the plant!

General Staff tops

Division bond drive figures indicate almost half of employees participate

As previously reported, the U.S. Bond drive, recently completed in the four Nuclear Division plants, added two new Treasury Department flags in our midst.

Final figures in last week show a total of 7,350 persons now on payroll purchasing of bonds, almost 50 percent of the total population. Breakdown of plant figures are: General Staff, 77.4%; Paducah Gaseous Diffusion Plant, 72.3%; ORGDP, 67.8%; Y-12, 42.6%; and ORNL, 40.4%.

The Minuteman Flag goes to General Staff and to the Paducah plant. ORGDP earned theirs last year, and will receive a star for this year's efforts.

Kenneth W. Sommerfeld, Assistant Plant Superintendent at ORGDP, who headed this year's drive for the three Oak Ridge plants, acknowledged the efforts in the three plants, praising both the individual chairmen and their secretaries: W. T. Carter, assisted by Wayne Tollett for the General Staff; James C. Barton, and his secretary, Annalyn Estes for ORGDP; Tommy Webber and his secretary, Judy Norris, Y-12; and Ward E. Foster, chairman for ORNL, and his secretary, Bonnie Reasor.

The Paducah bond drive was headed by John L. Clark, Assistant Plant Superintendent there.

Savings Bonds provide maximum safety of investment — backed by the full faith and credit of the Government. Very nearly half of Nuclear Division employees think it is an excellent way to save money.

Y-12ers play important roles in Nevada meet

Six Union Carbide nuclear criticality and radiation safety researchers will play prominent roles at two national meetings in June at Las Vegas, Nev.

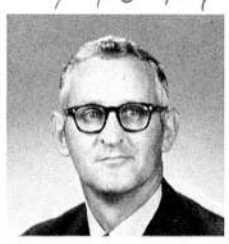
Y-12 health physicists C. M. "Hap" West and Edmond Roberts Jr., have authored a report entitled "Personal Safety Feature Standards for Industrial Radiation Facilities" to be presented at the Health Physics Society meeting, June 12-16.

The American Nuclear Society meeting, June 18-23, will hear papers authored by Jack D. McLendon, who heads the Y-12 Radiation Safety Department, and John T. Mihalczo, research physicist in the Y-12 Criticality Experiments Laboratory.

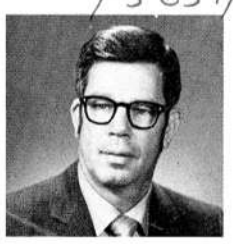
The McLendon report is entitled "Elements of a Good Nuclear Criticality Safety Program." The Mihalczo papers are "Randomly Pulsed Neutron Decay in Plutonium Metal Using ^{252}Cf as a Randomly Pulsed Neutron Source," and "Beta-Effective for a Normal-Uranium Reflected 93% ^{235}U-Enriched Uranium Sphere."

A. Dixon Callihan, who heads the Criticality Experiments Laboratory, will chair a session on Education for Nuclear Criticality Safety at the ANS meeting.

Joseph T. Thomas, a research physicist in the facility, will be recognized as new chairman of the Nuclear Criticality Safety Division of ANS.



Roberts



West

McLendon

Mihalczo

Callihan

Thomas

Patents Received

To **William A. Bell Jr., Ray L. Johnson** and **Allen M. Veach,** all of ORNL, for a "Helical Three-Stage Isotope Separation."

To **Cas J. Borkowski** and **Manfred K. Kopp,** both ORNL, for "Two-Dimensional Position-Sensitive Radiation Director."

To **Lloyd L. Brown,** ORNL, for "Chemical Exchange Method of Concentrating Carbon Isotopes."

To **Paul A. Haas** and **Sam D. Clinton,** both of ORNL, for "Method for Preparing Oxide Gel Microspheres from Sols."

To **Igor Alexeff, Roger V. Neidigh** and **William R. Wing,** all of ORNL, for "High Frequency Signal Correlator."

Comedy to end season

The Oak Ridge Playhouse's last production on its current season will be a comedy, "How the Other Half Loves." Performance dates will be June 9, 10, 16, 17, 23 and 24 at 8:20 p.m.

Fred Manneschmidt, J. T. Huffstetler, Jim Dumont, Barbara Wantland, Marge Caldwell, and Bonnie Talmi appear as the three couples whose relationships become tangled and untangled during the course of the farce. Season memberships for next year's plays will be available at the box office during the run of "How the Other Half Loves."

FIRST AID CLASS — Both advanced and refresher first aid courses are underway in the Fabrication and Maintenance Division at ORGDP. J. Mike Rogers is shown preparing Resusi-Anne, demonstrating mouth-to-mouth resuscitation to instructors. This will update their teaching knowledge and skills in this highly important function. From left are Richard C. Walzl, Harold B. Gunter, Cleamon Johnson, Clarence L. Tate, Millard C. Hanshaw, John T. White, John R. Goss, Jack B. Judd, Barton D. Simcox, Donald R. Lawrence and Rogers. Rogers is active in the Emergency Rescue Squad for Roane County. The Tennessee Department of Public Health has certified him in Emergency Medical Services and Training.

SPORTS NOTES

ALL CARBIDE

Recreation advises that the beach at the Clark Center Recreation Park will open Monday, June 5. Swimming hours are from 11:30 a.m. to 8 p.m. daily. Bathers are asked not to swim when lifeguards are not there.

There is a call out for horseshoe players for summer action in the Oak Ridge vicinity. Cut-off date for entering is June 9. Entries must be in to the respective recreation departments by then. Play will begin June 12.

Jack Huff, Y-12, won the second All-Carbide High Power Rifle match with a 384 out of a possible 500. ORNL's George Reimann was second with a 476, and Don Kiplinger, also from ORNL, placed third with 469.

Softball standings as of May 21:

Team	W	L
Hornets	3	0
Bucanneers	2	0
Knights	2	0
The Gang	2	0
Red Barons	2	0
All Stars	1	0
Computes	1	0
Losers	2	1
Bio-Rejects	1	1
Colts	1	1
Snakes	1	1
Thermos	1	1
Playmakers	1	1
Underdogs	1	1
Supersonics	1	1
A-Wingers	0	1
Centaurs	0	2
Ridgerunners	0	2
Bombers	0	3

The regular monthly meeting of the Carbide Camera Club will be held June 13, at 7:30 p.m. at Cheyenne Hall. A Kodak slide presentation will be shown on simplified color printing. The club will offer a course in Color Photography beginning at 7:30 p.m., June 22, in Cheyenne Hall.

June 6 has been declared 'fire off' time for the Carbide Pistol League's summer competition. If you want in on the action, just call Dick Gwaltney, extension 3-7648, or Recreation, 3-6723. They will give you more information.

Y-12 GOLF

Bennie Crass and Jim Vance took scratch honors at the Southwest Point golf tournament for Y-12ers held May 20. Their score of 76 was lowest in the big field. Rick Gallman earned 13 pars on the lake course, as did Bill Sise. Fred Wetzel took Division II honors with an 88; Division III honors went to Norm Dykes with a 90.

D Shift leaders list Bradley-Miller out front with 43 possible points . . . followed by Cobb-Enochs and Poteet--Sharpe.

The Shift League puts Ed Sise out in front of the pack with a 39 score. Charlie Baxter is a point behind Sise.

ORGDP GOLF

Alvin Boatwright parred the Wallace Hills course to take the low score of the tournament held at the Blount County locale. Division II honors went to O. D. Boyd, with a 78; and Division III scratch low went to W. U. Williams, with an 86.

ORNL GOLF

Whittle Springs was the scene for ORNL's May fight. Bill Martin underparred with a 71. Bill Foster copped honors in the second flight with a 79. John Amburgey's 86 was low in the third flight. In flight one, Jim Bryson, Al Gillen and Jack Meece all counted 12 pars.

Heart attack claims Bruce Greene,ORDGP

Bruce L. Greene, a veteran in the Fire Department at the Oak Ridge Gaseous Diffusion Plant, died May 10, from an apparent heart attack. A native of Wartburg, Mr. Greene came to work at ORGDP in early 1944.

Mr. Greene

Survivors include his wife, Mrs. Mary Greene, two sons and two grandsons. The family home is on Liberty Road, Wartburg.

Funeral services were held at the Liberty Baptist Church, with interment in the church cemetery.

Mary Carson honored grad at Central High

Mary Lynn Carson graduates this Spring from Central High School, Wartburg, with high honors, with a scholastic average of 3.72. She is studying science and mathematics.

Mary Carson

Miss Carson participated in speech and drama competition in 1970 and 1971; was second runner-up in Morgan County Junior Miss Pageant for 1972; captain of Central's basketball team for girls in the 1971 season; a member of the Beta Club, Glee Club, C Club and the Booster Club. She also worked as an office assistant in the school office her last two years of school.

Miss Carson is the daughter of Mr. and Mrs. Charles Carson (he is in Y-12's Metallurgical Development, and Mrs. Carson is a teacher at Central High.)

PHOTO COURTESY OF CONRAD REINHARDT

Irene Brogden and her ceramic art.

Enjoys teaching others her skills; finds extension of herself in doing so

"The first year and a half I said 'no.' I just knew I would hate the people who were doing hand building because I wanted to do hand building instead of teaching," says Irene Brogden, ORNL Analytical Chemistry Division. But after having taught hand-built pottery making in the Knoxville Bureau of Recreation classes for a year, she couldn't be torn away. "I've enjoyed showing people how to build pots. I find an extension of myself in their work. Their pots are part time.

"I don't know if mine is an acceptable teaching method or not. I use the principles of art which I have learned in other art mediums. I want my students to develop these principles such as harmony in their work. I feel like I've gotten good results.

"I assign the first three projects. In these projects the students learn all the principles necessary for handling coils and slab pottery. They also learn sgraffito or carving. I want every student's pot to be his own although I show them how."

Evidence of her success was a special show of her work and that of her students at this year's Dogwood Arts Festival Flower Show.

Her interest in ceramics began about 12 years ago in a Bureau of Recreation class similar to the one she now teaches. Previously she studied painting under Kermit Ewing at UT, Edward Daugherty at the YWCA and Bob Philips at Buckhorn. She found many of the same principles at work in ceramics as in painting and quickly became an enthusiast.

She is also a certified flower show judge and this year was a judge at the Dogwood Arts Flower Show and the Melton Hill Council of Garden Clubs show.

She limits her participation to community activities rather than those of associations. She says, "One morally should participate in community activities. It creates greater community pride and association of community people."

She always encourages her students to utilize their fullest creative abilities. "I would like to see people plan their flower gardens, plant their flowers, plan their pots, make the pots, arrange the flowers, and then paint the arrangement." And she can, too.

Tee-Off Time Application for June 24, 1972

(Check Appropriate Plant)

☐ ORGDP—CEDAR HILLS, LENOIR CITY
☐ ORNL—WALLACE HILLS, MARYVILLE
☐ Y-12—WHITTLE SPRINGS, KNOXVILLE

_____ LEADER _____ _____

_____ Phone Bldg.

_____

_____ _____
Time Preferred

COMPLETE AND RETURN TO YOUR RECREATION OFFICE
Entries must be received prior to drawing on June 21, 2 P.M.

ORGDP—Building K1001—C-Wing—Room 136
Y-12—Building 9711-5
ORNL—Building 4500—Room K-113

Tee-off times for all tournaments will be drawn on Wednesdays prior to each Saturday's tournament. Other than at Gatlinburg, golfers are responsible for reserving their own carts by contacting the pro shop following drawing for tee-off times.

Salt's role in high blood pressure

By T. A. Lincoln, M.D.

High blood pressure, or hypertension, is either directly or indirectly responsible for more heart and blood vessel disease than any other condition. Worldwide it is a much greater problem than coronary heart disease, even though closely related. The Japanese have much high blood pressure but proportionately fewer heart attacks than we do. The culprit may be sodium chloride (salt) pollution of our food.

Dr. Lewis K. Dahl and associates of Brookhaven National Laboratory believe that hypertension has an underlying genetic component which determines susceptibility but it is the excess salt in the diet which causes the disease to appear. By selective breeding, Dr. Dahl has developed a hypertension sensitive and a hypertension resistant strain of rats. The sensitive rats will not develop hypertension if they are not fed salt. But if fed a highly salted diet, they will develop a rapidly fatal form called malignant hypertension. Resistant rats suffer no ill effects from a salty diet.

The sensitive rats are also vulnerable to other causes of hypertension. When the blood supply to one of the kidneys is partially blocked, the sensitive rats develop earlier and more severe hypertension than the resistant rats.

Genetic Analyses

Of course, rats are a long way from human beings. However, several studies have been conducted by other investigators on the family histories of patients who developed hypertension with chronic kidney infections and glomerulonephritis. Those patients who had a positive family history of hypertension were much more likely to develop severe high blood pressure than those with a negative history. There is also correlation between the amount of salt added to the food and the incidence of hypertension in otherwise normal individuals.

Dr. Dahl has been searching for a genetic marker in his sensitive rats. He has found that they have a twofold greater ability to form an adrenal hormone, 18 hydroxycorticosterone. Genetic analysis indicates that this difference results from the action of a single gene. This change can account for only a small portion of the increased susceptibility to hypertension but is a valuable lead to the multiple chemical factors which must be involved.

Of even greater significance is the finding that sensitive rats have the capacity to inhibit a kidney enzyme called renin. Renin has been studied for years and is known to play a role in some causes of human hypertension.

Appetite for Salt

The possible implications of these studies are of tremendous importance. If eventually some way could be found to identify those children who have an inherited predisposition to hypertension, they could be started on a long-range preventive program early in life.

Dr. Dahl is appalled by our tremendous appetite for salt. He says it is a learned appetite. Since salt is present naturally in many foods, the body's small requirement can easily be met with unsalted food. Dr. Dahl has found that the baby food sold in most supermarkets has enough added salt in it to cause his sensitive rats to develop hypertension. He believes one way children get conditioned to expect their food to be "seasoned" is their early exposure to salty baby food.

Salt 'Weaning'

As adults, many of us would shudder at the thought of not salting our food as generously as we like. Still, if we had no great appetite for salt we would not miss it. There is a remarkable difference among adults in the amount of salt they use. Some liberally sprinkle salt over their food before they even taste it. Others never use extra salt.

If children with a predisposition to hypertension could be identified, their mothers could try hard not to develop their appetite for salt. Many parents would regard this as a hopeless task if it had to be started when their children were teenagers. It might be possible if started in infancy.

Probably a more attractive answer would be the development of a medicine which would cause the hypertension-prone child to excrete the salt he eats. The widely-used diuretics, called thiazides, achieve this and are of great value in the treatment of hypertension. They, unfortunately, have side effects which would make their use as prophylactic agents improbable. In time, a safe, mild medication may be found which could be taken much like a daily vitamin pill. It would have the same effect as restricting the intake of salt.

They Liked It!

Treatment of hypertension which does not appear until middle age is and always will be unsatisfactory. The only answer is prevention. The goal must be the identification of susceptibles and then dietary restriction of salt or cautious prophylactic medication to increase the excretion of excess salt.

Thousands of years ago people didn't need or get added salt in their diet. Like the bite off the forbidden apple, once they tried it they liked it! Since then, salt has become by preference, if not by need, an almost essential requirement. Like automobiles, electric lights, and TV sets, it is a reward for which our society pays a significant price. Let us hope salt pollution will be more easily controlled than the innumerable pollution problems which accompany our insatiable appetite for energy.

LeDoux son honored for high ACT scorings

David LeDoux, son of Paducah Plant's Reynold A. LeDoux, recently was named winner in the First District Scholastic Recognition Program. The winners come from 12 districts in Kentucky and are chosen on the basis of scores on the American College Test after being nominated by the principals of their respective schools.

DeLoux

LeDoux was honored at a luncheon in Louisville and received a gold medallion and a $250 cash scholarship. He plans to enter Vanderbilt Engineering School this fall.

His father is in Uranium Control of Operations at Paducah.

Y-12 and ORGDP list three recent promotions

Two promotions have been announced at the Oak Ridge Gaseous Diffusion Plant. Eugene E. Clark has been named an analytical chemist in the Laboratory; and Mrs. Josephine H. Walker, a supervisory trainee.

Mrs. Walker, nee Harris, came to ORGDP in February. She attended schools in Knoxville and studied business administration at Cooper's Business Institute.

A native of Knox County, she lives at Route 2, Louisville. She has two sons, Rodney, a machinist in Y-12; and Stanley, employed in construction work in Knoxville.

She enjoys bowling and gardening, and is active in the Mount Pleasant AME Zion Church.

E. E. Clark

A native of Whitesburg, Tenn., Eugene E. Clark has been at ORGDP five years. He is a graduate of Knoxville College and has done graduate work at UT.

Clark lives at 210 North Purdue Avenue, Oak Ridge. Mrs. Clark is the former Barbara Blevins, of Morristown. They have a son, Kevin.

Clark enjoys motocycle riding, hunting, Fishing and just "listening to music."

G. Dwight Ferguson has been promoted to a production inspection foreman in Y-12. A native of Alcoa, he served with the U.S. Army in Vietnam. He is a graduate of the Charles M. Hall School in Alcoa, where he was an outstanding athlete. Ferguson also attended The University of Tennessee.

Ferguson

He joined Union Carbide February 24, 1969.

The Fergusons live at 152 East Bell Street, Alcoa. Mrs. Ferguson is the former Glenda Smith. The couple has two children.

Still an active participant in athletics, Ferguson also plays a trumpet in a jazz combo.

Clark

Mrs. Walker

European conferences feature ORNL papers

ORNL staff members will be participating in several international conferences during June.

Loucas Christophorou, Health Physics Division, will present a seminar at the Hahn - Meitner Institute in Berlin entitled "Electron Attachment to Molecules in Very High Pressure Gases" on June 4; another on "Recent Studies on Electron - Molecule Interaction" at the Interuniversity Reactor Institute at Delft on June 6 and another on "Electron Attachment to Molecules" at the Physical Chemistry Institute in Julich, Germany, June 8.

James L. Scott, Metals and Ceramics Division, will present "Fabrication and Irradiation Behavior of Advanced Fuels for the HTGR" and S. Michael Ohr, Solid State Division, will present "Displacement Field and Image Contrast of Dislocation Loops in Graphite" at the International Carbon Conference, June 26-30 at Baden-Baden, West Germany.

George E. Boyd, Director's Division, will lecture at the NATO Advanced Study Institute in Forges les Eaux, France, on "Charged and Reactive Polymers," June 18-28.

Franz Plasil, Physics Division, will present "Predictions for Heavy Ion Reactions Based on the Rotating Liquid Drop Model" at the European Conference on Nuclear Physics in Aix-en-Provence, France, June 26-July 1.

TAKING A CLOSE LOOK—Part of the Paducah Plant's inspection team for Spring Clean-up mean to take a special look at areas in their jurisdiction. From left are Gary D. Phillips, Clayton G. Pratt, Robby G. Weatherford, B. Dale Johnson and George L. Bryant.

72 1015

THE SKILLET IS THE VILLAIN—Elzy N. Underwood, ORGDP's Instrument Department, holds a skillet similar to the one that cost him almost a month away from work. "Never take anything for granted," Underwood advises fellow employees.

If you break a bone

(Continued from Page 2)

cast and was on crutches until Christmas. Even after I got off the crutches, I couldn't be on my feet for long periods of time and I wasn't released to return to work until March 1 — over six months after my accident. My foot is still swollen, and it will probably be another six months before I can walk normally.

"The cause of my accident was carelessness in placing the ladder. The wood was not really large enough. I needed a more substantial type of blocking like a concrete block. Also I was in a hurry and reaching out too far.

"My advice is to level your ladder properly, take your time, and move the ladder often instead of reaching out too far.

"But if you don't take my advice and find yourself falling from a ladder some day—try to break a bone which will heal faster!"

Burning grease scalds hand; loses four weeks

Elzy N. Underwood, Instrument Department, in ORGDP's Maintenance and Fabrication Division, tells a chilling story with a not-so-chilling ending!

Last summer he was helping prepare supper at his 566 West Outer Drive, Oak Ridge, home. He left a pan of grease on the stove, and stepped out of the house to pick a tomato or two from his garden. When he returned the grease was smoking badly and he picked it up. Just as he did, the hot grease literally "exploded," going all over his arm and hand.

"I didn't know what to do with it, so I took it to the back yard and set it down. Then returned to the house, in very bad pain, to put ice and towels on the burn."

After being treated at the Oak Ridge Hospital, Underwood lost almost four weeks from work, with as much discomfort as he ever had. "A burn can really hurt," he warns.

His right hand still has tender parts where the scar tissue still is growing over his fingers.

"I thought the eye was on low," Underwood says, "but it wasn't."

He leaves fellow employees with a word of caution around the stove. "Never take anything for granted. Be sure eyes are out, or on the temperature you wish them. Just a second's worth of prevention could have saved me a very painful injury."

Underwood's injury was one of 35 off-the-job lost-time injuries to ORGDP employees last year.

Calendar of Events

TECHNICAL

June 1

Analytical Group, East Tennessee Section of American Chemical Society, Spring meeting: "Material Analysis Using an Si (Li) X-ray Energy Analysis System, A Lecture-Demonstration," Dale Gedcke, ORTEC. Civic Center Social Room, 8 p.m.

June 7

Chemical Technology Division Seminar: "Design Concepts for a Near Zero Emission Fuel Reprocessing Facility," O. O. Yarbro. Central Auditorium, Building 4500N, 3 p.m.

June 8

ORNL-NSF Environmental Program Film Series: "Multiply and Subdue the Earth." Isotopes Auditorium, Building 3047, 12 noon; East Auditorium, Building 4500N, 3 p.m.

June 9

Biology Division Seminar: "Genetic Control of Mutagenesis in Yeast," Jeff Lemontt, National Research Council of Canada. Large Conference Room, Building 9207, Y-12, 12:15 p.m.

Laboratory Chemistry Colloquium: "Thermodynamics of Non-Electrolyte Mixtures," R. H. Stokes, University of New England, Armidale, Australia. East Auditorium, Building 4500N, 1:30 p.m.

June 19

Biology Division Seminar: "Analysis of Protein Synthesis in Yeast through Conditional Lethal Mutants," Calvin S. McLaughlin, University of California, Irvine. Large Conference Room, Building 9207, Y-12, 12:15 p.m.

Patents granted

To **Joseph P. Hammond,** ORNL, for "Dispersion Strengthening of Aluminum Alloys by Reaction of Unstable Oxide Dispersions."

To **Charles R. Schmitt,** Y-12, for "Method for Producing Fibrous Carbon Structures."

To **William A. Bell Jr.** and **Allen M. Veach,** both of ORNL, for "Canted Magnetic Field for Calutron Ion Source."

Organization changes

(Continued from Page 1)

was assigned to Y-12 and was in Production Control prior to being appointed Head of Product Engineering and Scheduling. In April, 1970, he was appointed Manager of Acounting for the Nuclear Division. Hopkins and his wife, the former Ada Rudolph of Brownsville, Tenn., have two daughters. They live in Oak Ridge.

Hospital Chairman

Sommerfeld, who has served as Operations Division Superintendent at ORGDP since 1968, joined Union Carbide in 1958 and was assigned ot Y-12. Among his positions there, he served as Superintendent of both the Assembly Division and Project Engineering. Included in his civic activities, he is Chairman of the Board of the Oak Ridge Hospital of the Methodist Church and a member of the Board of Directors of the Oak Ridge Boys' Club. Sommerfeld is married to the former Roberta Buntin, Dallas, Tex. They have two children.

Clark has been with the Nuclear Division since 1944 when he joined the staff of ORGDP where he progressed to Head of the Cascade Operations Department. In 1951 he transferred to Paducah, also as Head of Cascade Operations. He later became Operations Division Superintendent. He is married to the former Edna Cochran. They have four children.

Denton has been with Union Carbide for more than 20 years. Prior to his appointment as Superintendent of Finance for the Nuclear Division, Denton served in a similar capacity at Y-12. Active in community affairs, Denton is a member of the Monroe County Primary Board. He is married to the former Josephine Howard of Sweetwater. The Dentons have three daughters. They live in Sweetwater.

Staff college following Vietnam duty for Bolen

Major Clyde T. Bolen, Jr.

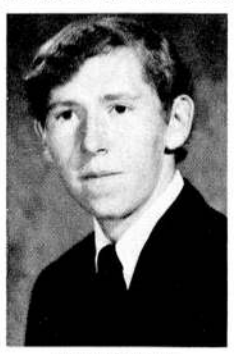
Major Clyde T. Bolen, Jr., recently completed a year of duty in Vietnam, and is attending the Armed Forces Staff College at Norfolk, Va. He holds three awards of the Air Medal.

He is a graduate of Oak Ridge High School, and holds a B.S. degree in mechanical engineering from The University of Tennessee, where he was named a distinguished military graduate and commissioned upon completion of the Air Force Reserve Officers Training Corps program. Major Bolen also holds an M.S. degree in astronautics from the Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio.

He is the son of Clyde T. Bolen, Sr., Mechanical Services section of the General Maintenance Department in ORGDP. Bolen has two other sons, Jack S. Bolen, also employed at ORGDP, and Major Herman R. Bolen, a helicopter pilot now stationed at Quantico Marine Base, Va.

Calvin Wright son cops Athens Circle K honor

Pat Wright, son of Calvin Wright, ORGDP Laboratory Division, has been honored at Tennessee Wesleyan College at Athens. He was named the most outstanding lieutenant - governor of the Kentucky - Tennessee district of Circle K International.



Pat Wright

Wright, a senior at TWC, has served as Lieutenant-governor of the Lookout Mountain division which governs Circle K clubs at Cleveland State, Hiwassee College, Lee College, TWC and The University of Tennessee in Chattanooga.

The Wrights live in Lenoir City.